

XXIV. *Further notes on the "Jurinean" Genera of Hymenoptera, correcting errors and omissions in a paper on that subject published in Trans. Ent. Soc. Lond. 1914, pp. 339-436.* By the Rev. F. D. MORICE, M.A., and JNO. HARTLEY DURRANT.

[Read November 1st, 1916.]

The Chronology of Panzer's Faunae Insectorum Germaniae.

On page 2 of Saunders's valuable Index to Panzer's Fauna Ins. Germ. he tabulates the "Dates of Publication as given on the Index of each Jahrgang." From this it might perhaps be supposed—and we at first supposed ourselves—that the actual date on which any particular Figure in Panzer's work first appeared would be that printed on the Index of the "Jahrgang" in which it was included. But this is not so. The year mentioned on the Title-page of each Index is that in which the Index itself was published, and this was not issued until the close of each completed "Jahrgang" (*i. e.* annual series of 12 "Heften"); whereas the "Heften," and the Plates contained in them, were issued at intervals in the course of the Jahrgang. For instance, the date given on the Index of Jahrgang 8 (= Heften 85-96) is "1805." But we know that even the last of these Heften (*viz.* 96) had already appeared by "October 1st, 1804," because on that day Panzer published a Notice of his forthcoming work, the "Kritische Revision," and stated in it that "8 complete Jahrgängen of the Fauna containing Heften 1 to 96" had then been issued. Accordingly the true "date" of any Heft in the Jahrgang dated 1805 cannot be later than September 1804, and the earlier Heften in it (*e. g.* Heft 85) may have appeared earlier yet, in 1803, or even 1802!—in fact, at any date not prior to that given on the Index of the previous Jahrgang, *viz.* September 3rd, 1801. It seems probable that the successive Heften of each Jahrgang were at first issued regularly, month by month, but that subsequently, from one cause or another, interruptions occurred to delay the issue of particular

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Heften, and that at last Panzer practically abandoned the attempt to conduct his work as a regular Serial, and simply published now and again a batch of Plates and descriptions whenever he happened to have one ready. In fact, during the last twenty years of his life (he died in 1829) he seems to have only published two "Heften" = one-sixth of a single "Jahrgang"!

Through not realising these facts properly until the greater part of our paper had been written and even set up in type, we fell into several errors in calculating the publication-dates of Figures in the *Fauna Ins. Germ.* Some of these we were just able to correct in time, *i. e.* before our paper actually appeared, but others escaped us, and these we hope to correct in the notes here following.

On page 341 of our paper we were guilty of another mistake in the same connection. We stated there that the coloured wrapper of each Heft bore "the date of its publication, and a list of the insects figured therein." It is true that such a list of insects is printed on each of the coloured sheets which we supposed to be parts of the wrapper. But apparently no dates were printed—at least, we can find none—on any of these sheets, until 1829, when Herrich-Schäffer succeeded Panzer as editor. In speaking of these "dates," we were confounding the (monthly?) wrappers of the Heften with the (yearly) title-pages and indices of the "Jahrgang." The following re-statement of the facts is, we believe, correct. Twelve times in each year (or nominal year) of publication, a batch of plates and corresponding descriptions was issued in a coloured wrapper, on which was printed a list of the insects dealt with. When, by the appearance of these 12 Heften, the Jahrgang was considered to be completed, the names already given on the wrappers were given afresh, but so rearranged as to form a classified Index to the whole issue of the completed Year; and this reorganised Index, with an accompanying Title-page (giving the name of the entire work, the publisher's name, the year and place of publication and so forth) was no doubt intended to be ultimately bound up into a Volume along with the Plates and Descriptions indexed in it, these having been already received at intervals in the past year by the subscribers. A similar practice has often been adopted by the Editors of scientific periodicals—subscribers receiving, say, in January 1916 an index to

the Volume whose last number appeared on or about December 1st, 1915.

The citations of page-numbers in the notes which follow refer to the pages in the Trans. Ent. Soc. Lond. for 1914.

Pages 346 and 347. The chronology on these pages requires some slight emendations:—

Page 346, par. (b). According to Mr. C. D. Sherborn's notes it would appear that Panzer did publish certain Heften of the Fauna in 1800—viz. 73–80 (73 is the first Heft quoted as 1800; 80 was out by 1800; 81 is the last quoted by Walckenaer—Aug. 1802; 82 is the first Heft which quotes the year 1800).

Page 347, line 7. After "Ins. Germ." insert "viz. Heften 81 to 85."

Page 347, par. (d), line 4. For "(1805)" read "in the same year, viz. 1804."

Page 347, par. (e), line 1. For "Next year (1806)" read "In 1806."

Page 374 (7 lines from bottom of page). The Type of *Tenthredo rosae* L. The insect ticketed "*rosae*" in Linné's handwriting in his cabinet at Burlington House is not, as we stated in error, the *Athalia rosae* of Authors, but *Athalia colibri* Christ (= *spinarum* F., = *centifoliae* Pz.), i. e. the well-known "Turnip Sawfly" of popular Entomological literature. How this mistake crept into our paper we do not know.

[My original note, written with the specimen before me gives the name *colibri* correctly! F. D. M.]

Page 375, line 19. For "see Lamarck" read "*sec.*" (i. e. *secundum*) "Lamarck."

Page 376, line 17. For "in September" read "probably in July" (Heft 82 was the tenth of the twelve comprised in the Jahrgang which is dated 1801, and which seems to have been completed shortly before October in that year).

Page 376, line 36. For "July–Sept." read "July (probably, *v. supra*)," and in the preceding line for "has precedence over" read "was probably an older name than."

Page 379 (9 lines from bottom of page). After "remark" insert "in *Fauna Succica*."

Page 384, lines 25–29. The statement that *E. troglodyta*,

or—as Mocsáry (1886) and later authors call the species—"niger" is "almost certainly not British" must be withdrawn. In the British collection at South Kensington most of the specimens called *niger* or *troglogyta* are *satyrus*. But among them are a ♂ and two ♀♀ from Coll. Stephens which are really *troglogyta*; and, if Stephens's statements in his *Illustrations* can be trusted, they are British insects, taken not far from London, perhaps at Hertford. We cannot, however, recognise in any of them the characters of the true *niger* as figured and described by Harris, and we still see no reason for identifying *troglogyta* F. with that mysterious species!

Page 403 (14 lines from bottom of page). The name **CEROPALES* Ltr. 1804 (Type: *maculata* F.) is clearly invalid, being a homonym of *CEROPALES* Ltr. 1802 (Type: *quinquecinctus* F.). Not on that ground, but to satisfy a supposed requirement of philology, Schulz has proposed emending it to "*Ceratopales*." As to this it should be remarked—(1) That the name being a homonym, should not be merely "emended," but sunk altogether and another name substituted for it. We have therefore proposed *HYPsicERAEUS* (*Υψικεραῖος*) in allusion to the peculiar situation of the antennae in this genus. (2) That in point of fact Schulz is mistaken in thinking the formation "*Ceratopales*" more correct philologically than *Ceropales*.

As we have noticed several attempts to "emend" other old names on exactly similar grounds, viz. the supposed necessity that the same form should be used in *inflecting* or "declining" a noun and in *compounding* it, it may be worth while to examine in some detail the actual practice of Greek writers in this matter. The stem used in "declining" *κέρας* is no doubt "*κερατ-*," and this form of the stem *may* be used in forming a compound, e. g. Aristotle has *κερατοφόρος*, *κερατώδης*, etc. But we also find *κεροβάτης* in Aristophanes, *κερό-δετος* and *κερο-φόρος* in Euripides, *κερονικός*, (i. e. *κερο-ελικος*) in Sophocles, and several other forms exactly analogous to "*Cero-pales*" used by the best writers of antiquity! Yet another possible compound from the same stem would be "*Ceraopales*" (cf. *κερο-ξός* in Homer). And again the analogy of *κερασφόρος*, which is used by Euripides and Plato (!), would justify "*Ceraspales*." The fact, which seems to be very generally unknown, is, that real Greek "compound-" (or "so-called compound-") words were not made as a

rule by putting two words together according to some pre-existing canon of philologists, but by prefixing or affixing to a stem one out of several possible modifications of another stem, the choice of the particular modification to be employed being guided, not by rules of grammarians, but by the influence of some apparent analogy,* or by a sense which made the speaker or writer choose instinctively out of several possible combinations that which first occurred to him, or which he felt to be most euphonious.

A few more examples may be given to illustrate the gratuitous nature of many modern "emendations." Because the inflexion-stem of *νήμα* (*nēma*) "thread" is *νηματ-* certain authors have thought it necessary to change such names as "*Nemo-phora*" to "*Nemato-phora*," etc., etc. But the stem of *δέρμα* (*derma*) "skin" is *δερματ-*, that of *αἷμα* (*haema*) "blood" is *αἷματ-*;—and yet!—Aristotle calls "bats" *δερμόπτερα*, not *δερματόπτερα*! Sophocles expresses "bathed in blood" by *αἶμο-βαφής*, and Aristotle calls "blood sucking" insects *αἶμο-βόρα*, although either writer—had he chosen to do so—might have preferred the analogy of such forms as *αἷματο-πότης* "blood drinking" (Aristophanes), *αἷματ-ώδης* "blood-red" (Thucydides)—in fact, this last word, (as well as *αἶμο-βορος*) is employed by Aristotle on another occasion.

If it is rash to dogmatise as to what is, and what is not, possible in the formation of Greek compounds, it is almost more so to lay down laws of this kind in dealing with Compounds in Latin. Such Latin writers as use Compounds freely—and the best Latin writers, except certain poets, hardly form new Compounds at all!—are either mere imitators (at a distance) of Greek originals, or deliberately aim (like Plautus, etc.) at comic effects, or write on technical subjects without any attempt at literary style, so that it is impossible to found any reasonable arguments on their practice as to what is a solecism, and what a legitimate word-formation. Thus it has been held that *pallidipes*, *leucomelaena*, etc., etc., are "right" and "*pallipes*," "*leucomelana*," etc., wrong. But it may

* This is the case in all languages and at all times. A recent newspaper-article used the word "Villa-dom" to express "a region of villas." And this was not produced by compounding "Villa" with "dom," but by imitating the analogy of such words as Kingdom, Christendom, etc.

be replied with some confidence, that a Latin prose-writer of the Ciceronian or Augustan age would have been disinclined to approve any one of these formations, while analogies to each and all of them can be found abundantly in old Latin (*e. g.* Plautus) or late Latin (*e. g.* Appuleius), to say nothing of the many centuries which followed, while Latin was still a living language in the mouths and on the pens of churchmen, physicians, lawyers, and diplomatists, and, in short, the professors and expositors of every branch of literature and science. It by no means follows that a formation is to be branded as "not Latin" because it is not to be found in Smith's Smaller Latin Dictionary. It may require correction in a schoolboy's Latin Exercise, because he is supposed to be reproducing the Latin of a particular period. But it is quite another matter to assume the right of doctoring into conformity with tastes and fancies of our own the names which have come down to us from the founders of our science, such as Linné, Fabricius, Latreille, etc. Even the most unimpeachable of such emendations* are at best superfluous, contributing absolutely nothing either to the advancement of the science, or to the convenience of those occupied with it. [With similar misapplication of learning, and hardly more waste of time and energy, one might re-edit Shakespeare or the Bible, correcting their lapses from philological accuracy in the transcription of Proper names—Mark Antony, Shylock, Pharaoh, etc. It might be pointed out that, according to the Recommendations of a certain Committee, "Niobe all tears" ought to have appeared as *Nioba*, and "Patnos" as *Patmus*!] Sometimes, however, they are worse than superfluous, merely creating a difficulty in consulting Indices or Catalogues, as when *Heriades* is "corrected" to *Eriades*, or *Omalus* to *Homalus*. And sometimes, as we have tried to show, they are not, in fact, required by any such supposed Laws of Greek or Latin Word-formation as they postulate. So that on the whole we come to the conclusion which is briefly comprehended in Fabricius's remark upon the subject. *Nomina*, he says in his preface to "Systema Entomologiae," *mutata nunquam usum, saepius confusionem, praebent.*

* We do not mean to deny that some kinds of "emendation" may be sometimes necessary, as, for instance, in the case of an obvious misprint!

Two other gratuitous and undesirable "emendations" of old authors' names may here be noted for rejection!

(1) Dahlbom in introducing his generic name *Cyphononyx* derives it from "χυφων" [*sic!*] "furcifer" and ὄρνυξ *unguis*. Therefore W. A. Schulz has "corrected" it to the truly hideous form "*Chyphononyx*"! But there is not, and (philologically speaking) *ought not to be*, any such word in the Greek language as "χυφων";—the phonetically correct form is χύφων, and no other is employed by Greek authors, or recognised by lexicographers. Accordingly *Cyphononyx* (χυφων-ορνυξ) is at least a possible name; though a real Greek would probably have disliked the jingling reiteration (-on -on), and perhaps (remembering Homer's "μόνυχες ἱπποί") would have cut the word down to χυφῶνυξ (*Cyphonyx*). But, for all practical purposes, *Cyphononyx* is good enough, and there is no real reason for altering it in any way. "*Chyphononyx*," on the other hand, is an absolute monstrosity and on no account to be adopted.

(2) Because the Greek noun πρίων has for its Inflection-stem not πριω- but πριον- (or sometimes apparently πριων-) v. Dalla Torre "corrects" *Priocnemis* of Schiödte to "*Prionocnemis*." But the form *Priocnemis* is completely justified by classical analogies. From ἄκμων (stem ἄκμων-) we get in actual Greek not ἀκμονό-θετον but ἀκμό-θετον; and from κίων (stem κιον-) both κιονό-κρῶρον and κιό-κρῶρον (the latter being, on the whole, more "classical" than the former). Neither "*Prio-cnemis*," then, nor "*Prionocnemis*" can be said to be an impossible form. Of the two, "*Priocnemis*" seems slightly better supported by actual precedents, and it is certainly more euphonious. It should therefore be restored, and there was never any reason for objecting to it.

Pages 411–412. In June 1909 (Ann.-Mag. NH. (8 s.) 3, p. 484) Mr. Rowland E. Turner, after examination of the type in Banks Coll. of *Tiphia variegata* F., announced its identity with the *Palarus flavipes* Pz., Auctt. Assuming this to be correct, the name *variegata* F. must be employed, having priority over *auriginosus* Eversm., and also over the otherwise invalid **flavipes* Pz., Auctt.

Page 417, line 16. In treating *communis* Auctt. as a synonym of *annulata* L. we were following Alfken who (in Zeitschr. für Hym. und Dipt. 1902, p. 88) accepted Förster's identification of the Linnéan species. Nylander,

however [in Not. Sällsk. Faun-Flor. Fenn. 2. (Rev. Syn. Ap. Bor.) p. 234 (1852)], points out that in Linné's description of *annulata* the bases of the ♂ antennae are said to be marked with white, which is not a character of *communis*, and also that in the Linnéan Collection (now at Burlington House) the only specimen ticketed by Linné himself as *annulata* is not a *communis*, but belongs to the species which Nylander had formerly [in Not. Sällsk. Faun-Flor. Fenn. 1. (Ådnot. Mon. Ap. Bor.) p. 188 (1848)] named in error **dilatata* K. and afterwards [in Not. Sällsk. Faun-Flor. 2. (Suppl. Ap. Bor.) p. 94 (1852)] re-named *borealis*. The latter has the scapes conspicuously marked with white; and as, accordingly, Linné's supposed "type" agrees with his original description there seems no reason to doubt its authenticity, in which case *borealis* Nyl. and not *communis* Nyl. should be sunk as synonymous with *annulata*. (*Borealis* and *communis* being both species of Nylander's own making, it is particularly unlikely that his decision on this point should be erroneous!)

Page 420, line 28. "Type 3: *Andrena bicolor* F." *Andrena bicolor* F. is identified by most recent authors except Schmiedeknecht (*e.g.* F. Smith, Thomson, E. Saunders, and v. Dalla Torre) with the summer generation of *Andrena gwynana* Kirby. But the latter has the abdomen clothed more or less with pale brown hairs, also in the ♂ the legs are pale-haired, and the scopae of the ♀ are fulvous.

Fabricius has described his species at least four times, and always in the same words:—"A. thorace villosa ferrugineo, abdomine atro immaculato"; and short though this description is, it seems clearly to indicate not the *bicolor* of recent authors, but the *Andrena* which we have been accustomed to call *thoracica* F. Rossi in Fauna Etrusca, after quoting Fabricius's diagnosis, goes on to say "*Statura fere A. mellificae. Tota atra, thorace tantum superne saturate rufovillosa. Abdomen glabrum nitidum. Alae apice fuscae, praesertim primores.*" This is a most excellent description of our "*thoracica*," and seems to make it certain that Rossi identified *bicolor* F. with that species, and not with the *bicolor* of Smith, etc. Panzer and Christ have both given coloured figures of *bicolor*, and the figure by Panzer is accepted by Fabricius in *Systema Piezatorum* as representing his species. Now in both these figures the pilosity of the legs is represented

as entirely black!, and this suits *thoracica*, and certainly does not suit the other species. Kirby, again, expressly asserts in Mon. Ap. Angl. 1. (p. 67) that "*Andrena bicolor* is nothing more than the male of *Apis thoracica*, and has precisely the same oral organs."

It seems clear, then, that Fabricius's contemporaries were generally agreed in their interpretation of his diagnosis; and it is not easy to understand why their view has gone so completely out of fashion. It is true that Fabricius treated *bicolor* and *thoracica* as different species; but this was a necessary consequence of his error which Kirby pointed out—namely that he supposed his *thoracica* to be not an "*Andrena*," but an "*Apis*." In Systema Piezatorum he silently gave up that notion, by listing *thoracica* as well as *bicolor* under *Andrena*. But we believe that any one comparing his descriptions of the two insects will find that the one is practically identical with the other:—

<p style="text-align: center;">3. <i>thoracica</i>.</p> <p>A. atra, thorace rufo, alis apice fuscis.</p> <p>Habitat in Daniae nemoribus.</p>	<p style="text-align: center;">22. <i>bicolor</i>.</p> <p>A. thorace villosa ferrugineo, abdomine atro immaculato.</p> <p>Habitat in Daniae nemoribus.</p>
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Unfortunately, owing to his mistake about the genus of *thoracica*, Fabricius described *bicolor* before *thoracica*; so that, if our view of the facts is correct, the former name ought to be restored, and the latter to fall as a synonym.

Page 423. When proposing the new name *Donisthorpea*, in lieu of §*Lasius* F., we were led to suppose that *Acanthomyops* Mayr was generically distinct, and were unacquainted with the subgeneric names *Dendrolasius* Ruzsky and *Chthonolasius* Ruzsky. These may now be regarded as four subgeneric divisions of the genus *Acanthomyops* Mayr.

Forel [Rev. Suisse Zool. 24. 460 (IV. 1916)] rightly called attention to these omissions as follows:—"MM. Morrice et Durrant (Trans. Ent. Soc., London 1914, page 421 [1915]) ont institué en remplacement du Genre *Lasius* F. (1804) qu'ils disent tombé par synonymie de *Lasius* Jurine (1801, Apide), un nouveau genre *Donisthorpea*. Mais ces auteurs ne tiennent aucun compte des sous-

genres *Acanthomyops* Mayr, *Dendrolasius* Ruzsky et *Chthonolasius* Ruzsky, dont le dernier est à mon avis synonyme de *Lasius* s. str. et ne pouvait être maintenu. Donc, suivant mon opinion, la synonymie doit être la suivante, si Morrice et Durrant ont raison :—

Genre *Acanthomyops* Mayr (1862)

= *Lasius* F. 1804 (non Jurine 1801)

= *Donisthorpea* Morrice et Durrant;

Type : *claviger* Roger,

Subgen. *Chthonolasius* Ruzsky, type : *niger* L. (*flavus* ex. Ruzsky).

Subgen. *Dendrolasius* Ruzsky, type : *fuliginosus* Latr.

P.S.—M. Emery m'écrit qu'à son avis il vaudrait mieux prendre pour *Lasius* le nom nouvellement déterré par Wheeler de *Formicina* Shuck., nom en partie basé sur le *Lasius flavus*. Je n'ai rien à y opposer, pourvu qu'on en finisse une bonne fois avec ces déménagements perpétuels des anciens noms."

We do not quite understand the process by which *niger* is to be constituted the Type of *Chthonolasius* Ruzsky, in lieu of *flava* L., indicated as the Type by Ruzsky, nor do we accept the suggestion that *Formicina* Shuck. should be used in lieu of *Donisthorpea*. The following is the original reference to *Formicina* Shuckard :—"The group has been divided according to the structure of the abdomen; which in some has but one node only to its peduncle, but in others it has two. It is in the first division that we find the stingless genera, namely, *Formica* Linn., *Formicina* Shkd., *Polyergus* Latr., *Polyrachis* Shkd., and *Dolichoderus* Lund, besides several other yet uncharacterised genera, which we shall shortly publish.

(155). The *Formicina rufa*, or horse ant, forms those large nests of dry leaves and sticks we so frequently observe in the woods; and within these nests two genera of *Staphylini* appear to be parasitical—*Lomechusa* and *Pella*; and in their deepest recesses innumerable wood-lice (*Onisci*) are constantly found." . . . "Another singular *Staphylinus* (the minute *Claviger*), which is totally blind, and otherwise remarkable in structure, inhabits the nests of the *Formicina flava*, where it has once been discovered in this country." (Shuckard, Lardner's Cabinet Cycl. 10. (Hist. & Nat-Arr. Ins.) 172 (1840.))

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Formicina would doubtless have been described at length by Shuckard in his Elements of British Entomology, but only one part (*Coleoptera*) was published (in 1839). It is not necessary to discuss the status of "*Formicina* Shkd." as a possibly valid genus, for Wheeler [Ann. N.Y. Ac. Sc. 21. 164 (1911)] has very properly cited as its Type **FORMICA** rufa L., and has definitely sunk it as a synonym of *Formica* L.—Emery's subsequent suggestion that *flava* L. should be regarded as the Type cannot therefore be maintained.

[It should be noted that §*Formicina* Canestrini (1868) *Arachn.* is homonymous with *Formicina* Shuck. (1840).]

The synonymy of *Acanthomyops* is as follows:—

ACANTHOMYOPS Mayr.

= §*LASIUS* (*nec* Jrn.) F. (1804); = **FORMICINA* (Shuck. p., 1840) Forel & Emery (1916)—*nec* Wheeler (1911); = **ACANTHOMYOPS** Mayr (1862); = **DENDROLASIUS** Ruzsky (1912); = **CHTHONOLASIUS** Ruzsky (1912); = **DONISTHORPEA** Morice & Drnt. (1915); = **CHTHONOLASIUS* (*nec* Ruzsky) Forel (1916).

Type 1: *Formica clavigera* Roger (Roger 1862; Wheeler 1911).

ACANTHOMYOPS Mayr Verh. ZB. Ges. Wien 12:1862. 699-700 (1862); Wheeler Ann. N.Y. Ac. Sc. 21. 157 (1911); Forel Rev. Suisse Zool. 24. 460 (1916).

Type 2: *Formica fuliginosa* Ltr. (Ruzsky 1912).

DENDROLASIUS Ruzsky Kasani Zap. Veterin. Inst. 29. 629-33 tf. 2 (1912); Forel Rev. Suisse Zool. 24. 460 (1916).

Type 3: *Formica flava* L. (Ruzsky 1912).

CHTHONOLASIUS Ruzsky Kasani Zap. Veterin. Inst. 29. 629-33 tf. 3 (1912). **FORMICINA* Shuck. (p.) Lardner's Cab. Cycl. 10. (Hist. Nat.-Arr. Ins.) 172 (1840); Forel & Emery Rev. Suisse Zool. 24. 460 (1916).

[*nec FORMICINA* Shuck. Lardner's Cab. Cycl. 10. (Hist. Nat.-Arr. Ins.) 172 (1840); Wheeler Science 33. 859, 860 (2. VI. 1911); Ann. N.Y. Ac. Sc. 21. 164 (17. XI. 1911)—Type: rufa L. (**FORMICA** L.)]

[*nec CHTHONOLASIUS* (Ruzsky) Forel Rev. Suisse Zool. 24. 460 (1916)—Type: nigra L. (**DONISTHORPEA** Morice & Drnt.)].

Type 4: *Formica nigra* L. (Morice & Drnt. 1915).

DONISTHORPEA Morice & Drnt. = §*LASIUS* (*nec* Jrn.) F. Syst. Piez. pp. xi, 415-8, no. 78 sp. 1-10, Ind. 18 (1804); Auctt. **DONISTHORPEA** Morice & Drnt., Tr. Ent. Soc. Lond. 1914. 423 (1915); **CHTHONOLASIUS* (*nec* Ruzsky) Forel Rev. Suisse Zool. 24. 460 (1916).